

# 24h QuAALity

## Quality assurance in 24h-caregiving at home by means of digital support

GESUNDHEITSWISSENSCHAFTEN

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TECHNIK



# 24h QuAALity

## > Funding:

> Austrian Research Promotion Agency (FFG), Austrian Ministry of Transport, Innovation and Technology

## > Consortium:

> University of Applied Sciences – Fachhochschule Campus Wien (Department Nursing Science, Department Engineering, Department Health Sciences, Teaching Support Center, Online Services)

## > External project partners:

- > NOUS Wissensmanagement GmbH,
- > Johanniter Österreich Ausbildung und Forschung gem. GmbH,
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- > ÖGKV Österreichischer Gesundheits- und Krankenpflegeverband,
- > ipb - Institut für Personenbetreuung,
- > Home-Care-Management ALEXANDER WINTER e.U.,
- > SMART ASSETS Development GmbH,



> **Project Duration:** 2019 – 2021

# Providing older people with 24h-care at home

- 24-hour care is a cornerstone of home care for older people.
- 30,000 older people in Austria use a 24h-caregiver together or as an alternative to family care and mobile care (Statistik Austria, 2018).
- More than 60.000 24h-caregivers, primarily from Slovakia, Hungary and Romania, work in private households and flats in Austria. They commute in a two-week rhythm between Austria and their home country (WKO, 2018).
- The people to be cared for need support for housekeeping activities, up to high need for round-the-clock care (Bauer, Österle, 2013).

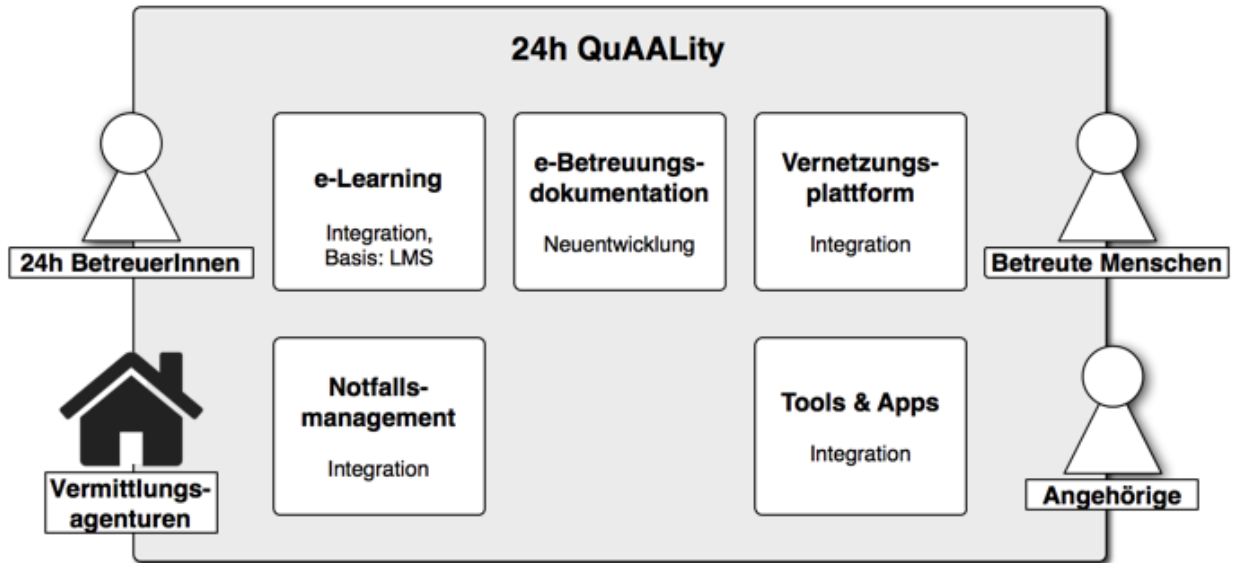
# Providing older people with the 24h care at home

## > **Burdening conditions in the 24h caregiving at home**

- Low language skills
- Low specific training
- Isolated working conditions with chronically ill people
- Only everyday care is permitted, but it is often necessary to do specific nursing care
- Specific nursing care is only permitted with appropriate training or after being delegated by a certificated nurse or doctor (Haslinger-Baumann, 2019)
- No sufficient comprehensive quality control is in place (Rechnungshofbericht, 2018)

## 24h QuAALity – project aims

Development and evaluation of a distributed client-server software solution for the support and quality assurance of 24h-caregivers at home.



# 24h QuAALity – project aims

## The application software contains:

- > 1. Information and education portal (e-Learning)
- > 2. Comprehensive electronic care documentation
- > 3. Integrated emergency management
- > 4. Links to translation pages or networking opportunities

Four Languages: German, Slovakian, Hungarian and Romanian

## 24h QuAALity target groups

- > **Primary users:** elderly people who are cared for
  
- > **Secondary users and direct addressees of the technical application:** 24h-caregivers
  
- > and:
  - > Relatives
  - > Placement Agencies for 24h Caregivers
  - > Certificated Nurses

# 24h QuAALity – project development

1. phase

- User-needs analysis, participation and survey of users' needs in relation to two target groups

2. phase

- Design and development of the distributed client-server software solution

3. phase

- Evaluation of the prototype during application in 24h-caregiving



# Phase 1: User-needs analysis, participation and survey of users' needs in relation to two target groups



# Research methods in Phase 1

## > **Survey methods (exploration phase)- user needs**

- Guided individual interviews: (45: 18 care workers, 3 nurses, 24 clients)
- Focus group interview (1: 4 care workers)
- Cultural probe studies (2)
- Analysis of caring documentation (4)

## > **Evaluation methods (exploration phase)**

- Thematic Analysis (Kuckartz 2008)
- Qualitative Text Analysis (Kuckartz, 2016)

## > **Recruitment of participants**

- Purposive sampling (gatekeepers of different organizations)

# Results of Phase 1

## > **Information and education portal (e-learning):**

- > Need for information on major diseases faced in the 24h care at home, such as dementia, diabetes and stroke
- > Information should be shown in German and additional text and/or subtitles also in Slovakian, Hungarian and Romanian
- > Short videos with short texts on the most important diseases – in German due to high willingness to learn German
- > E-learning is a good form of learning because it is time- and place-independent.

# Results of Phase 1

## > **Comprehensive electronic care documentation:**

- People in need of profound care require a higher documentation effort.
- It is difficult to complete the documentation because the 24h caregivers are confronted with complex caring situations.
- Lack of German skills is a hurdle when filling in the documentation.
- A simple way of documentation is preferred.

# Results of Phase 1

## > **Integrated emergency management:**

- The emergency call system is often used to get help quickly.
- The form of communication is different in families, not all of them have clear guidelines of communication.
- Not all 24h caregivers know the emergency number 144.
- There is a lack of knowledge about the client's data, e.g. previous illnesses.

# Results of Phase 1

## > Links to translation pages or networking opportunities:

- Google Translation ist often used, but the translations are sometimes incorrect.
- Translations are also carried out simultaneously in conversations
- Much used communication possibilities are online: Facebook (groups and messengers), WhatsApp, Viber and Instagram
- Video calls, sending photos and voice messages

# Phase 2: Design and development of the distributed client-server software solution



## Results of Phase 2 – further outlook

- Development of e-learning content, a caring documentation system, an emergency system and a networking platform
- Phase 2 will start in autumn 2019
- Well-known companies will develop the product





## Phase 3: Evaluation of the prototype during application in 24h care



## Results of Phase 3 - future outlook

- > **Longitudinal 12-month evaluation involving more than 100 households facilitating 24h care**

### **The following parameters are going to be evaluated with the users:**

- Technical performance of the prototype in 24h care
- Usability of the solution
- Acceptance factors such als frequency of use, expected effects on the quality of life and perceived usefulness for primary and secondary users
- Effects on health literacy and health behavior of the 24h caregivers and older people in everyday caring routine

# Thank you for your attention!

